

## ABSTRACT:

The electric lamp comprises a lamp vessel (1) which is transparent to visible light and which accommodates a light source. At least a part of the lamp vessel (1) is covered with a light-absorbing coating (3). According to the invention, [said] the light-absorbing coating (3) comprises a network which can be obtained by conversion of an organically modified silane 5 by [means of] a sol-gel process. The organically modified silane is selected from the group formed by compounds of structural formula  $R^I Si(OR^{II})_3$ , wherein  $R^I$  is an alkyl or aryl group and  $R^{II}$  is an alkyl group. Preferably,  $R^I$  is  $CH_3$  or  $C_6H_5$  and  $R^{II}$  is  $CH_3$  or  $C_2H_5$ . Nano-sized silica particles having a diameter  $d \leq 50$  nm may be incorporated in the network. The pigment is preferably chosen from the group formed by  $Fe_2O_3$ , P-doped  $Fe_2O_3$ ,  $ZnFe_2O_4$ , 10  $ZnO.Fe_2O_4$ ,  $CoAl_2O_4$ ,  $Nd_2O_5$ ,  $BiVO_4$  and zirconium praseodymium silicate or mixtures thereof. The light-absorbing coating (3) of the electric lamp according to the invention is optically transparent, substantially free of scattering and stable at temperatures up to 350 °C. [Fig. 1]